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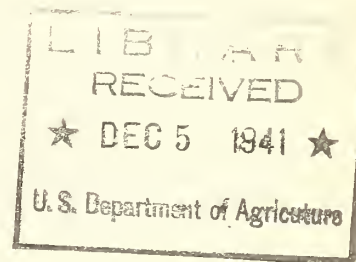


United States Department of Agriculture  
Bureau of Animal Industry  
Animal Husbandry Division  
Washington, D.C.

COLUMBIA SHEEP

and  
Their Place in Range Sheep Production

by  
Damon A. Spencer and John A. Stoehr \*



It has been rather common range practice for several decades, in some western areas, to crossbreed sheep by mating range ewes that predominate in Rambouillet or other fine-wool breeding with rams of long-wool breeds such as Lincolns and Cotswolds for the purpose of getting larger ewes that would produce more pounds of marketable wool and lambs than can be produced with fine-wool ewes of the parent stock. While this has advantages it has given rise to considerable periodic variation in flocks because crossbred ewes that were produced in this way were, as a rule, alternately mated to fine-wool rams and then to long-wool rams. This practice leaves much to be desired in flock-type stability. It has introduced a disturbing variation in both mutton and wool qualities.

In an effort to contribute stability to the production of large range ewes, the Columbia strain of sheep has been developed by the Bureau of Animal Industry. This strain is, in general, the result of cross-breeding select Lincoln rams with Rambouillet ewes and proceeding from this original crossbred by mating the most select first-cross rams with carefully selected first-cross ewes and interbreeding the rams and ewes descending from them. This undertaking was pursued at Laramie, Wyoming, from 1912 to 1917 and since that time this development of the Columbia sheep by the Bureau of Animal Industry has been conducted at the United States Sheep Experiment Station, Dubois, Idaho. This method has progressed in this manner toward the type desired until the Columbia is now recognized as a breed. Select sheep of this breed are being registered by the Columbia Sheep Breeder's Association, Bozeman, Mont.

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\*Damon A. Spencer is senior animal husbandman in charge of sheep and goat husbandry investigations, Bureau of Animal Industry, Washington, D. C. John A. Stoehr is associate animal husbandman, United States Sheep Experiment Station and Western Sheep Breeding Laboratory, Dubois, Idaho.

The Columbia breed has been developed under strictly range conditions. The spring and fall grazing have been on a sagebrush-grass type range at an altitude of 5,000 to 6,000 feet. The average annual precipitation on the spring-fall range during the development of the Columbia has been about 10 inches. More than half of this precipitation has been in the form of snow falling from December to April. The precipitation is normally heavier on the surrounding mountains and lighter on the desert winter ranges. Summer grazing has been available at altitudes of from 6,000 to 8,500 feet on or near the Targhee National Forest. The ewes were bred in November in paddocks on the range. Winter grazing was provided on the Salmon National Forest at an altitude of from 5,000 to 6,500 feet, where they remained until storms forced them down into winter feed lots about the middle of January.

Toward the end of the winter range period, and when grazing was not very plentiful, a small amount of supplementary feed was given each day. In winter quarters from 6 to 7 pounds of alfalfa hay was scattered over the snow or ground per day per ewe until a few weeks before lambing when some supplementary feed was again provided. This daily allowance of hay per ewe was an average quantity when feeding the general run of alfalfa hay, some of which may have been damaged by rain or by improper harvesting. From 1 to 1½ pounds of grain, largely oats, was fed each day per ewe after lambing until the ewes were turned on the range. Lambing started the first part of April in the sheds, and the flock usually went out on the spring range in the latter part of April. Shearing and dipping were done while the sheep were near headquarters on the spring range about the first part of June. They were started to the summer range during the latter part of June.

The Columbia is a white-faced sheep, that is large, vigorous, moderately low-set, polled, and free from wool blindness and body wrinkles. The body has good length which balances well with the width and depth. It is especially well fleshed in the loin and has a square rump and a good leg of mutton. A roomy middle and a wide loin are characteristics of the breed. Well-developed forequarters indicate a strong constitution. The Columbia is large boned and rugged. The legs are straight and well placed. The head is moderately large and is held erect. Mature rams range in body weight from 190 to 250 pounds while mature ewes range from 135 to 155 pounds under range conditions in the fall. On the average, mature ewes of this breed produce about 12 pounds of unscoured wool per year, which, on a commercial basis yields approximately 50 percent scoured clean wool. The average length of staple of the fleeces of one year's growth is approximately 3½ inches. Mature rams produce fleeces weighing 18 pounds or more for a growth of 12 months under range conditions. The annual length of staple for fleeces of rams averages about 3-¾ inches. The fleece tends to stay well together in storms. Desirable market grades of the wool from Columbia sheep, on the basis of fineness, as determined commercially, are 3/8 Blood and ¼ Blood.

Columbia lambs grow rapidly and have the ability to mature at an early age under good range conditions, and without grain, averaging 80 pounds in weight at the age of about 130 days.